

Appl. No. 09/503,140  
Amdt. Dated September 7, 2005  
Reply to Office Action of May 26, 2005

### REMARKS

Applicants have amended claims 28, 30, and 32 in order to obviate Examiner's rejection of these claims under 35 U.S.C. §112.

Applicants respectfully request reconsideration of Examiner's rejection of claims 1, 19, 20, and 28-32 under 35 U.S.C. §103(a). Examiner has rejected these claims in view of the cited prior art references of *Hayashi et al.* (U.S. Patent No. 5784356) in view of *Bullock* (U.S. Patent No. 5764651). In the May 26, 2005 Office Action, Examiner asserted that *Hayashi* taught a "control means for dynamically controlling and adjusting an amplitude of the signal superimposed on the signal applied to the laser diode ... based on the calculated error rate in order to reduce the error rate ... while reading user data from the disc." The Examiner then cites to Figure 7 and col. 4, lines 61 – 67 of the *Hayashi* reference as support. Applicants, however, respectfully refute Examiner's assertion. As shown in the cited paragraph of which Examiner cites to, the variable gain amplifier 30 "increases the amplitude of the RF signal" when the "correction flag count increases." (See Column 4, lines 62 – 67). Reading on in that same paragraph, *Hayashi* teaches that "as a result, gain control of the RF signal (**reproduction signal**) is performed so as not to generate any compensation flag ... This operation allows the error level of the **reproduction signal** to fall within the range in which data can be satisfactorily read..." (Column 5, lines 2 – 6, emphasis added). At no point does *Hayashi* teach or suggest the use of a

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control means for controlling reading conditions by determining a parameter that makes an error rate smaller before or during playback by modulating a parameter at a predetermined frequency, calculating an amount of error rate variation synchronized with the modulation, and varying the parameter in proportion to the calculated amount. Rather, Hayashi is directed solely to modification / shaping of the **reproduction signal after having been reflected off** the recording medium in order to improve the signal to noise ratio of the resultant RF signal. Accordingly, Applicants submit that Hayashi fails to teach or suggest Applicants currently claimed invention. Because the Bullock reference fails to make up for the shortcomings of the Hayashi reference, Applicants respectfully request Examiner withdraw the 35 U.S.C. §103 rejection, and place these claims in condition for allowance.

While the Examiner states generally in the May 26, 2005 Office Action that "Note: pickup 12 superimposes the digital write signal onto a laser beam for transmission," Examiner fails to provide support for that statement from the Hayashi specification, and fails to show that Hayashi teaches such a method in response to the number of read errors rising above a predefined limit.

In regard to the rejection of claims 2, 3, 5 – 7 under 35 U.S.C. §103, Applicants submit that for at least the reasons cited above, the cited reference fail to teach or suggest the claimed invention. Accordingly, Applicants respectfully request Examiner withdraw the rejections, and place these claims in condition for allowance.

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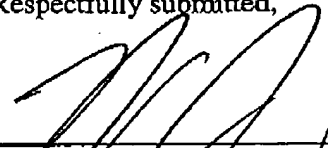
Examiner's remaining references cited but not relied upon, considered either alone or in combination, also fail to teach applicant's currently claimed invention. In light of the foregoing, Applicants respectfully submit that all claims now stand in condition for allowance.

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Respectfully submitted,

Date:

9/26/05

  
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